

GRASSROOTS

Synthetic Erosion Control Mat

Grassroots™ is an Australian made permanent erosion control matting made from heavily UV stabilised synthetic fibres which are needle punched together into an open weave three dimensional structure. Grassroots™ has been designed to protect underlying soil in steep slopes and channels from moderate to high velocity water flows, rain splash and other erosive conditions, while allowing seeds to germinate successfully and grow through the matting providing permanent vegetative reinforcement.

APPLICATIONS

A synthetic long-lasting grass establishment and erosion control matting ideal for:

- Channels.
- Swale drains.
- Riparian areas.
- Steep batters.
- Spillways and dam embankments
- Floodways.
- Golf courses.
- Alpine areas.
- Coastal sites.
- Reinforced soil slopes

SECTOR SUITABILITY



Roads



Rail



Coastal



Slopes & Walls



Ports and Aviation



Water



Primary Industries



Waste



Sports & Recreation



Mining



Civic & Landscaping



Building

BENEFITS

Halts Erosion

Extremely tough and flexible, Grassroots™ will provide immediate protection against soil loss and may be exposed for extended periods before grass is established.

Strength

Grassroots™ has been used successfully in many channel lining and road edge rehabilitation applications requiring increased resistance to soil loss as a result of hydraulically induced shear stresses.

Durability

The fibres used in Grassroots™ contain high levels of stabilisers used to inhibit photooxidative degradation of the polymer. After 1,000 hours of accelerated testing in a xenon arc weatherometer, Grassroots™ showed no loss in tensile strength.

Long-term

Grassroots™ is an aesthetically pleasing surface treatment that provides an enhanced long-term structure to assist with seed germination and reinforcement to the vegetation which, when mature, will eventually hide the erosion control mat.

SPECIFICATIONS

Name	Grassroots™
Material	UV stable synthetic polypropylene fibres, needle punched onto a polypropylene scrim.
Mass	380 - 400 g/m ² (nominal).
Density	90 - 107 kg/m ³ .
Limiting Velocity:	<ul style="list-style-type: none"> - Product only = 2.8m/s - With 6 month vegetation growth = 7.5m/s
Limiting Shear:	<ul style="list-style-type: none"> - Product only = 180Pa - With 6 month vegetation growth = 510Pa
Scrim	Polypropylene mesh, black, 4 x 4 squares, weight 80gsm. Tensile strength (Cross Directional): not less than 5 kN/m ² . Tensile strength (Machine Directional): not less than 5 kN/m ² .
Pinning Rate	3 pins per m ² (see Installation Sheet).

Dimensions	Length	Width	Area
Standard	60m	2.0m	120m ³
Wide	60m	4.0m	240m ³



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